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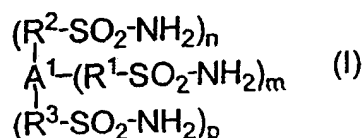
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(54) Title: FLUORINATED SULFONAMIDE COMPOUNDS AND POLYMER ELECTROLYTE MEMBRANES PREPARED THEREFROM FOR USE IN ELECTROCHEMICAL CELLS



(57) Abstract: A fluorinated sulfonamide small molecule having the general structure (Formula I) wherein m, n and p are 0 to 3, with the proviso that m + n + p is equal to 1 to 4; A¹ is an aromatic heterocyclic group, with the proviso that carbon atoms of the heterocyclic ring are fully substituted by fluorinated sulfonamide groups; and R¹, R², and R³ are linear or branched perfluoroalkylene groups, optionally containing oxygen, chlorine, bromine, or iodine atoms. Polymers and small molecules useful in making polymer electrode membranes, membrane electrode assemblies, and electrochemical cells; such as fuel cells, are also described.



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